The specification has been herein amended to overcome the Examiner's objections thereto.

Claims 1 - 4 have been canceled. New claims 5 - 14 have been added in the application, of which claim 5 sets forth a wiper device of a motor vehicle and new independent claims 9, 13 and 14 set forth a wiper blade. Claims 6 - 8 depend on claim 5 and claims 10 - 12 depend on claim 9. Subject matter of original claim 1 is included in claims 5 and 9, subject matter of claim 13 has antecedent support at page 2, last paragraph to page 3, first paragraph and subject matter of new claim 14 has antecedent support at page 9, first paragraph of the specification. A fee for the additional independent claim is enclosed.

It is believed that the rejection of original claims 1 - 4 under 35 U.S.C. 112, second paragraph has been overcome by this Amendment.

Claims 1 - 4 are rejected under 35 U.S. C. 102(b) by being anticipated by Arai et al.

This rejection is being respectfully traversed.

Arai et al teaches a wiper blade which has one bracket element receiving a wiper arm and connected to a backing member of a wiper blade. The curvature and the rigidity of the backing member are changed in the longitudinal direction.

It should be noted that it is important for Arai et al that the blade rubber contacts the surface of a windshield being wiped under a uniform pressure distribution along the length of the blade rubber to enable satisfactory wiping effects (see col. 1, lines 11 - 16, lines 31 - 33 and col. 3, lines 20 - 23, 34 - 36 and 43 - 47 of the Arai et al disclosure). In order to attain such wiping effects the backing member has two elongated spaced-apart pivot connection points which cooperate with the bracket to receive and distribute the load applied by a wiper arm. In the region of the pivot connection points, the backing member has a greater width than that in the middle or in the end parts. The load is distributed as shown in Fig. 7. Thus, according to the Arai et al teaching the pressure distribution must be uniform so that a high pressure or a low pressure in some regions should be avoided.

Contrary to the Arai et al teaching of a uniform pressure distribution, applicant teaches and claims a decreasing pressure distribution at at least one end section of the wiper blade.

Contrary to the Examiner's statement at page 3, last paragraph of the Office Action, that Fig. 7 of Arai et al shows that at least when applying high pressure, the end sections have a lower contact force compared to that in the middle section, Arai fails to suggest such an idea as one skilled in the art would understand the Arai et al disclosure.

It is respectfully submitted that Arai et al neither shows nor suggests the structure of the wiper blade with the wiper element and wiper strip which distributes a contact force on the wiper strip against the vehicle's window to provide a contact force which is greater in the center section o the wiper strip than in at least one of the two end sections of the wiper strip.

In short, it is respectfully submitted that claims 5 - 14 are allowable over the art.

Reconsideration and allowance are most respectfully solicited.

Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE SPECIFICATION

Paragraph beginning at page 1, line 4 has been amended as follows:

In wiper blades of the type under consideration ~~described in the preamble to claim 1~~, the carrying element is intended to assure a predetermined distribution of the wiper arm-induced wiper blade pressing force - often also called pressure - against the window over the entire wiping field swept across by the wiper blade. Through a corresponding curvature of the unstressed carrying element - i.e. when the wiper blade is not resting against the window - the ends of the wiper strip, which is placed completely against the window during the operation of the wiper blade, are loaded toward the window by the carrying element which is then stressed, even when the curvature radii of spherically curved vehicle windows change with each wiper blade position. The curvature of the wiper blade must therefore be slightly sharper than the sharpest curvature measured in the wiping field on the window to be wiped. The carrying element consequently replaces the expensive support bracket construction with two spring rails disposed in the wiper strip, as is the practice in conventional wiper blades (published, non-examined German patent application 15 05 357).

Paragraph beginning at page 1, line 23 has been amended as follows:

~~The invention is based on a wiper blade according to the preamble to claim 1.~~

In a known wiper blade of this type (German patent 12 47 161), in order to produce as

uniform as possible a pressure loading of the wiper blade against a flat window over its entire length, a number of embodiments of the carrying element are provided ~~as attainments of this object.~~

The subheading "Advantages of the Invention" at page 2 has been replaced with the following subheading:

- SUMMARY OF THE INVENTION. -

Paragraph beginning at page 2, line 21 and ending at page 3, line 8 has been replaced with the following paragraph:

--According to the present invention, a wiper blade which can be moved back and forth across the window comprises an elongated wiper strip, and a spring-elastic carrying element wherein a contact force of the wiper strip against the window is greater in its center section then in at least one of two end sections thereof. In the wiper blade according to the present invention ~~with the features of claim 1~~, in the vicinity of the reduced contact force, a steeper drag position of the wiper lip is produced in comparison to the region with the greater contact force. This steeper position of the wiper lip encourages its tilting-over process in the wiping direction reversal positions of the wiper blade, which is initiated there and then continued in the region that has the greater contact force. This prevents the abrupt snapping over of the entire wiper lip and the unpleasant knocking noise connected with it. This also eliminates the problems in the design of the carrying element

with regard to the contact pressure distribution in spherically curved windows. Namely, it has turned out that the reduction of the contact pressure at the end section of the wiper blade does not inevitably also attend a reduction in the wiping quality. -

IN THE CLAIMS

Original claims 1 - 4 have been canceled.

New claims 5 - 14 have been added as follows:

- 5. A wiper device for motor vehicles, comprising a driven wiper arm and a wiper blade connected to said wiper blade, said wiper arm moving said wiper blade back and forth across the window of a motor vehicle laterally to a longitudinal space of the window and loading said wiper blade in relation to the window, said wiper blade including an elongated wiper strip placeable against the window, and an elongated spring-elastic carrying element disposed on a side of said wiper strip remote from the window and having connecting means for connecting said wiper arm thereto, said spring-elastic carrying element extending parallel to an axis of elongation of said wiper strip to distribute a contact force against the window over an entire length of said wiper strip, said wiper strip having a center section and two end sections, said contact force of said wiper strip being greater in said center section than in at least one of said two end sections. -

- 6. The wiper device according to claim 5, wherein said contact force of said wiper strip against the window is lower at said two end sections than in said center section. -

– 7. The wiper device according to claim 5, wherein said contact force of said wiper strip against the window is at least almost of a uniform magnitude in said center section and decreases at said end sections. –

– 8. The wiper device according to claim 5, wherein said spring-elastic carrying element has on a side thereof oriented toward the window a concave curvature that is sharper than the sharpest curvature of a spherically curved window in a region of a wiping field that can be swept across by said wiper blade and a concave curvature in said center section of the carrying element is sharper than in said end sections thereof. –

– 9. A wiper blade for a wiper device of a motor vehicle for wiping a window of the motor vehicle, comprising an elongated wiper strip placeable against the window, and an elongated spring-elastic carrying element disposed on a side of the wiper strip remote from the window, said spring-elastic carrying element extending parallel to an axis of elongation of said wiper strip to distribute a contact force against the window over an entire length of said wiper strip, said wiper strip having a center section and two end sections, said contact force of said wiper strip being greater in said center section than in at least one of said two end sections. –

– 10. The wiper blade according to claim 9, wherein said contact force of said wiper strip against the window is lower at said two end sections than in said center section. –

- 11. The wiper blade according to claim 9, wherein said contact force of said wiper strip against the window is at least almost of a uniform magnitude in said center section and decreases at the said end sections. -

- 12. The wiper blade according to claim 9, wherein said spring-elastic carrying element has on a side thereof oriented toward the window a concave curvature that is sharper than the sharpest curvature of a spherically curved window in a region of a wiping field that can be swept across by said wiper blade and a concave curvature in said center section of the carrying element is sharper than in said end sections thereof. -

- 13. A wiper blade for a wiper device of a motor vehicle for wiping a window of the motor vehicle, comprising an elongated wiper strip placeable against the window, and an elongated spring-elastic carrying element disposed on a side of the wiper strip remote from the window, said spring-elastic carrying element extending parallel to an axis of elongation of said wiper strip to distribute a contact force against the window over an entire length of said wiper strip, said contact force being greater in a center section of said wiper strip than in at least one of two end sections thereof, said wiper strip having a wiper lip which contacts the window and is constructed such that it tilts over in reversal positions in a wiping direction of said wiper blade in a region of a reduced contact force and continues to tilt in a region of a greater contact force against the window. -

- 14. A wiper blade for a wiper device of a motor vehicle for wiping a window of the motor vehicle, comprising an elongated wiper strip placeable against the window, and an elongated spring-elastic carrying element disposed on a side of the wiper strip remote from the window, said spring-elastic carrying element extending parallel to an axis of elongation of said wiper strip to distribute a contact force against the window over an entire length of said wiper strip, said spring-elastic carrying element having a curvature which is sharper in a center section of said spring-elastic carrying element than in an end section thereof-

IN THE ABSTRACT

The original Abstract has been canceled and a new Abstract has been added as follows:

A wiper device with a wiper blade for cleaning windows of motor vehicles, in which the wiper blade can be moved back and forth laterally to its longitudinal span by a driven wipe arm which can be connected to the wiper blade and loads the same against the window. The wiper blade has an elongated wiper strip that can be placed against the window and an elongated spring-elastic carrying element, which has a connecting unit for the wiper arm and is disposed parallel to the longitudinal axis of the wiper strip to distribute a contact force over the entire wiper strip length. A particularly effective and low-noise operation of the wiper system is achieved because the contact force of the wiper strip against the window is greater in its center section than in at least one of two end sections of the wiper strip.